

United States Department of the Interior
National Park Service**National Register of Historic Places Registration Form**

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of PropertyHistoric name: Kaua'i Belt Road (North Shore Section) (Additional Documentation)Other names/site number: Kūhiō Highway, Hawai'i Route 560

Name of related multiple property listing:

(Enter "N/A" if property is not part of a multiple property listing)

2. LocationStreet & number: Hawai'i Route 560City or town: Princeville, Hanalei, Wainiha, Hā'ena State: Hawai'i County: Kaua'iNot For Publication: ☐Vicinity: ☐**3. State/Federal Agency Certification**

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this ___ nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property ___ meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

___national ___statewide ___local

Applicable National Register Criteria:

___A ___B ___C ___D

Signature of certifying official/Title:**Date**

State or Federal agency/bureau or Tribal Government

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In my opinion, the property ___ meets ___ does not meet the National Register criteria.

Signature of commenting official:

Date

Title :

**State or Federal agency/bureau
or Tribal Government**

4. National Park Service Certification

I hereby certify that this property is:

___ entered in the National Register

___ determined eligible for the National Register

___ determined not eligible for the National Register

___ removed from the National Register

___ other (explain:) _____

Signature of the Keeper

Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply.)

Private: ☐

Public – Local ☐

Public – State ☒

Public – Federal ☐

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Category of Property

(Check only **one** box.)

Building(s) ☐
District ☒
Site ☐
Structure ☐
Object ☐

Number of Resources within Property

(Do not include previously listed resources in the count)

Contributing	Noncontributing	
_____	_____	buildings
<u>3</u>	_____	sites
<u>11</u>	<u>5</u>	structures
_____	_____	objects
<u>14</u>	<u>5</u>	Total

Number of contributing resources previously listed in the National Register 15

6. Function or Use

Historic Functions

(Enter categories from instructions.)

Transportation: road-related

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Current Functions

(Enter categories from instructions.)

Transportation: road-related

7. Description

Architectural Classification

(Enter categories from instructions.)

Other: Roadway

Other: Bridge, Pratt and Warren through truss

Other: Bridge, reinforced concrete/slab

Other: Culvert, pipe/box

Other: Ford (crossing)

Materials: (enter categories from instructions.)

Principal exterior materials of the property: Asphalt, Metal (steel), Concrete, Wood, Stone
(lava rock)

Narrative Description

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with a **summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

The Kaua'i Belt Road (North Shore Section), constructed beginning in 1900, is an approximately 10-mile section of Hawai'i State Route 560 that traverses Kaua'i's North Shore between Princeville and Hā'ena State Park. The two-lane road, named Kūhiō Highway, is generally characterized by a curvilinear path over an undulating landscape, narrow bridges and culverts that carry the roadway over water crossings, and numerous pull-offs and side roads that allow for access to scenic, historic, cultural, community, and agricultural areas. Importantly, the road

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provides connectivity between communities on the North Shore as the primary transportation route along its east-west route. The roadway is paved with asphalt, marked with Hawai'i Department of Transportation (HDOT) standard signage, and features intermittent retaining walls, guardrails, or pylons to provide safety to users.

Following devastating storms in April 2018 that impacted local communities for months and severely damaged the road, HDOT, in coordination with the Federal Highway Administration (FHWA), proposed a series of repairs and improvements to Kūhiō Highway that included modifications to the National Register of Historic Places (NRHP)-listed Kaua'i Belt Road (North Shore Section). A finding of adverse effect under Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108) resulted in preparation of a memorandum of agreement to mitigate the adverse effect.¹

This documentation was prepared in fulfillment of Stipulation V of the *Memorandum of Agreement among the Federal Highway Administration, the Hawai'i State Historic Preservation Officer, and the Advisory Council on Historic Preservation regarding the Kaua'i Emergency Flood Repairs and Cleanup at Various Locations April 2018, Districts of Halelea and Wailua, Kaua'i, Hawai'i* (MOA).

The MOA states:

Within 12 months of execution of this MOA, HDOT shall initiate an update to the Kaua'i Belt Road National Register (NR) Nomination Form to address changes since the district was listed in the National Register of Historic Places. The NR update shall be completed by a preservation professional meeting the SOI Standards for Historian, Architectural Historian or Historic Architect. HDOT shall submit the draft update to SHPO within 18 months of initiating the update of the nomination form.

This documentation is intended to supplement the existing 2004 NRHP registration form for the Kaua'i Belt Road (North Shore Section) by updating its contributing and noncontributing resources, describing a new area of significance, providing additional historic context, and consequently amending its period of significance. Furthermore, the narrative description offers a detailed discussion of the Kaua'i Belt Road's setting and its importance to the North Shore communities.

Descriptions of the Kaua'i Belt Road (North Shore Section) exist in prior documentation prepared to evaluate the roadway's NRHP eligibility in 1976 and eventual NRHP listing in 2004. Individual resources identified as contributing or noncontributing in the 2004 NRHP registration form are identified in bold within the narrative description provided below at their first mention.² As in prior documentation, physical descriptions of the Kaua'i Belt Road and its environs provide a current assessment at the time of the documentation's preparation; a discussion of

¹ Implementing regulations for the Section 106 process are found at 36 C.F.R. § 800.

² While entered into the NRHP in 2004, the Kaua'i Belt Road (North Shore Section) NRHP registration form was completed April 8, 2002.

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changes to the Kaua'i Belt Road that occurred after preparation of its existing NRHP registration form are also included in this documentation.

Narrative Description

Physical Description

The **Kaua'i Belt Road (North Shore Section)** begins in Princeville at Mile Post (MP) 0 where a HDOT sign notifies users of the end of Hawai'i State Route 56 and the beginning of State Route 560. At this point, the road width is reduced through the elimination of a central median and narrowing of shoulders. The road passes by the Princeville Center shopping center where standard HDOT signage notifies travelers in both directions of a "SCENIC AREA," namely the **Hanalei Valley Scenic Overlook (Hanalei Valley Lookout)**, which provides views mauka across Hanalei Valley and toward the Hanalei National Wildlife Refuge. The overlook includes a pull-off area and timber guardrails. Signs mark ADA accessible parking spaces and U.S. Fish and Wildlife Service informational signage describes aspects of the refuge.

As the road continues past the overlook, it remains narrow while tall grasses and low trees encroach the alignment. The belt road then begins a modest descent, passes several residences, and is lined by a continuous W-beam guardrail on its makai side as the road veers right before a sharp, hairpin turn to the left around a projecting ridge. At the turn, the roadway widens and features a pull-off on the makai side for the Hanalei Bay Overlook (Hanalei Bay Lookout) atop Hanalei Hill, which provides views makai toward Hanalei and Hanalei Bay. The overlook contains a parking area and is lined by a W-beam guardrail that continues downhill from the overlook as the roadway descends toward the Hanalei River along the Hanalei Grade. The ridge's exposed, steep-cut slopes form a constricted path for the roadway as it approaches the river.

At the base of the ridge, the road turns right to cross the **Hanalei Bridge** at approximately MP 1.2. The single-span truss bridge features timber decking that carries the roadway along the bridge. Modest coping lines the bridge abutments which extend along the roadway and turn toward the right to transition to a low, lava rock wall. The roadway then follows alongside the Hanalei River, winding its way through Hanalei Valley, while extensive taro fields fill the mauka side of the road. Hanalei Valley's relatively level landscape provides expansive views across the fields and toward mountains in the island's interior. Access into the valley's taro fields is provided by numerous unmarked openings from the road for agricultural equipment and farmers; many access points are not gated.

Between MP 1.2-2, the road passes over a series of culverts that include concrete or rubble masonry headwalls usually lined on the interior by W-beam guardrails. At MP 2, the road crosses **Culvert #1**, a box culvert with concrete headwalls and W-beam guardrails that line the roadway. The road then continues to follow the Hanalei River before curving left near MP 2.3 as it enters Hanalei town. In Hanalei, the roadway is characterized by numerous curb cuts that provide access to one- and two-story commercial and residential buildings lining the roadway.

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Culvert #2 at MP 2.4 features concrete headwalls with a low rise above the roadway. **Culvert #3** at MP 2.6 features concrete headwalls with a similar low profile; a lava rock retaining wall defines the stream channel on the makai side of the roadway. Beyond Culvert #3, the road widens to include turning lanes for Aku Road and the Hanalei Center. Beyond the Hanalei Center, the road again narrows to two lanes.

Near MP 3, the road enters the Wai'oli Mission District, which provides intermittent views of the Wai'oli Valley. The road widens to include a turning lane for Hanalei Elementary School on the mauka side of the roadway before once again narrowing to two lanes. The road continues through the town before meeting the **Wai'oli Bridge** at the western end of Hanalei near MP 3.4. Wai'oli Bridge crosses Wai'oli Stream as a single-span, single-lane concrete structure with concrete abutments and sidewalls topped with coping.

Beyond the bridge, the road curves toward the right around the Makaihuwa'a ridge, which is flush with vegetation, before once again revealing agricultural views in the Waipā Valley. Low fences, some covered with climbing vines or hidden with shrubs and grasses, line the roadway's mauka side. At MP 3.9 is the **Waipā Bridge**, a single-span, single-lane concrete structure with concrete abutments and sidewalls topped with coping. At this juncture, the belt road's distance to the shore is reduced, affording a passing glimpse of Hanalei Bay while crossing Waipā Bridge. The shoreline comes into full view at MP 4, where a dirt pull-off area on the makai side of the roadway allows parking and access to a small beach on Hanalei Bay. At this location, the roadway rests only a few feet above the shoreline. From there, the road continues along the shore and crosses the **Waikoko Bridge** near MP 4.2. The bridge is a single-span, single-lane concrete structure with concrete abutments and sidewalls topped with coping and spanning Waikoko Stream.

Past the bridge, the road continues to wind around Pu'u Kamanu's steep ridge and alongside paved and unpaved shoulders that provide access to and views across Hanalei Bay. The road moves slightly inland from the shore to Makahoa Point. A partially paved pull-off near MP 4.7 serves as the Makahoa Point Lookout. Adjacent available roadway shoulders are utilized as a parking area for Waikoko Beach and Lumaha'i Beach. Portions of the parking area are bordered by remnants from a lava rock wall. The roadway then turns sharply to the left and continues on a steady, serpentine incline above the beaches below. Additional paved pull-off areas provide views from the Lumaha'i Beach (East) Lookout at MP 5.3 while mauka views comprise a rocky outcropping. This roadway section is constructed on a steep ridge where concrete walls with incised lines, intended to replicate lava rock stonework, help prevent erosion and add safety to the curvilinear road in this area. Further along this stretch, a lava rock stone wall segment has been incorporated into concrete drainage channels on the roadway's makai side. The road continues to wind around the ridge, past two paved pull-offs lined with W-beam guardrails that comprise the Lumaha'i Beach (West) Lookout at MP 5.4. Beyond the second pull-off, the roadway begins a winding descent with S-bends around exposed rock faces. After a turn to the right, the roadway straightens and vegetation clears to afford views mauka of the Lumaha'i Valley. On the roadway's makai side is the west end of Lumaha'i Beach, which is now nearly level with the roadway and accessed via an unpaved parking area.

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After the parking area at approximately MP 6 is **Lumaha'i Bridge**, a curved, two-lane, multi-span bridge with concrete curbs and rounded steel railings. It features concrete abutments and a concrete deck that spans the Lumaha'i River. Once over the bridge, the roadway passes Kolokolo Point and curves to continue following the shoreline along Wainiha Bay from a slightly elevated position. Gaps between trees on the roadway's makai side offer views toward the water. As Wainiha Beach comes into view, a paved pull-off and low lava rock wall line the roadway before it turns sharply to the left; concrete Jersey barriers line the curve. After the curve, the road descends into Wainiha and the Wainiha Valley. In the village at MP 6.5, the road passes over **Wainiha Bridge #1**, a single-lane, ACROW temporary modular steel truss bridge lined with W-beam guardrails. The bridge affords views of the Wainiha River and Wainiha Beach before residential and commercial buildings in Wainiha appear alongside the roadway. Wainiha is characterized by one- and two-story buildings near the roadway with a variety of fences used to delineate yards. Shrubs are often used as screening along the road, which bends slowly to the left through the village.

West of Wainiha, the road curves to the right to cross the Wainiha River at approximately MP 6.7 over **Wainiha Bridge #2** and **Wainiha Bridge #3**, each a single-lane, ACROW temporary modular steel truss bridge lined with W-beam guardrails. A thin strip of land in the Wainiha River provides a landing for Wainiha Bridge #2 prior to the beginning of Wainiha Bridge #3. After the river crossing, the roadway begins a slow right bend to return toward the shoreline. After passing Wainiha Beach Park, which is accessible via a dirt road, the road begins a modest ascent to maneuver around a ridge extending from Puunopili. A sharp left turn at MP 7 provides a small pull-off with views of Wainiha Bay. Around the curve, the road travels alongside a beach as it straightens toward Hā'ena.

A left bend in the road at approximately MP 7.5 carries it over **Hā'ena Bridge #1**, a single-lane, single-span concrete bridge with low concrete sidewalls and a concrete deck. After the bridge, the road continues through Hā'ena. The village features one- and two-story residential and commercial buildings with varied setbacks. Many parcels feature dense landscaping along the road that provides additional privacy; others have fences to delineate property boundaries. In areas where roadside vegetation is sparse, views along the roadway provide glimpses of Makana rising in the distance. At approximately MP 8.6, the road bends left as it approaches the shoreline of Maniniholo Bay, passes the Tunnels Beach access road, and crosses **Hā'ena Bridge #2**. The bridge is a narrow, single-span, two-lane bridge lined with W-beam guardrails.

Past the bridge, the road continues slightly inland from Maniniholo Bay, which is not visible from this roadway segment. The road continues toward a nearby ridge and bends toward the right to cross **Mānoa Ford** at MP 8.8. The ford crossing is a narrow, depressed, and paved roadway segment designed to allow Mānoa Stream to flow over the road. Beyond the ford is the Maniniholo Dry Cave beneath an exposed rock outcropping on the roadway's mauka side, while the makai side features Hā'ena Beach Park and its wide, grassy lawn and unpaved parking area lined with lava rocks. The road follows the shoreline around the park, beginning a modest ascent near MP 9 before turning left around a low ridge. As the road straightens, it is lined with lava

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rocks while providing views toward the beach and Maniniholo Bay. The roadway then makes a gradual left bend and begins a serpentine path through lush vegetation while moving inland from the shore and toward the Limahuli Valley.

As the road continues to wind, the pointed peak of Makana becomes highly visible and the vegetation gradually thins alongside the road. After passing the Limahuli Garden and Preserve, National Tropical Botanical Garden, the road crosses **Limahuli Culvert** at MP 9.6. The culvert comprises a single-lane, concrete slab over Limahuli Stream. Past the culvert, the roadway continues through a lush forest canopy to reach Hā'ena State Park and its Kē'ē Beach parking area. The road follows around a ridge and past a small taro farm and small concrete box culvert on its makai side. Just beyond the farm is a pull-off area for Waikapalae, a wet cave on the roadway's mauka side. From here, the roadway continues a winding path to another parking area within Hā'ena State Park and ends at MP 10, which includes informational signage, the start of the Kalalau Trail, and beach access.

Setting

Since its formation millions of years ago, Kaua'i, the oldest of Hawai'i's major islands, has slowly been eroded by relentless storms and seas battering the island's porous lava-formed topography. Over time, this phenomenon created a North Shore coastline replete with wide valleys and crescent beaches framed by ridges and cliffs that dive into the ocean. Rivers and streams crisscrossing the landscape empty into a Pacific Ocean perpetually forming storms that inundate the island, a cyclic ritual that continues to shape Kaua'i, its North Shore, and the communities and residents that call this area home. The Kaua'i Belt Road, an early footpath-turned-roadway, navigates the North Shore along a narrow two-lane road that allowed for early agricultural expansion into these valleys, and importantly, connected communities to one another. But the Kaua'i Belt Road achieves more than access to its users. Its serpentine movements, lush vegetation, formidable cliffs and slopes, and narrow bridges calm traffic and provide opportunities for users to absorb the naturalistic elements surrounding the road. By maintaining the road's general appearance since the early twentieth century, including its alignment and single-lane bridges, the road has also had a limiting effect on North Shore development in addition to preservation of its agricultural and rural traditions. The result is a ten-mile stretch with distinct sights and sounds and a feeling unique to this area of Kaua'i.

Sensory Elements of the Kaua'i Belt Road

As described in the 2004 NRHP registration form, the Kaua'i Belt Road features a "rural coastal setting" with "scenic views throughout its course, including beaches, ocean, mountains, waterfalls, vernacular architecture, native and exotic vegetation, and traditional landscapes." These character-defining features are integral to the Kaua'i Belt Road's setting. Setting is one of seven aspects of integrity used to assess a historic property's physical characteristics that existed during the period of significance. NRHP guidance explains:

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Setting is the physical environment of a historic property. Whereas location refers to the specific place where a property was built or an event occurred, setting refers to the character of the place in which the property played its historical role. It involves how, not just where, the property is situated and its relationship to surrounding features and open space.

Setting often reflects the basic physical conditions under which a property was built and the functions it was intended to serve. In addition, the way in which a property is positioned in its environment can reflect the designer's concept of nature and aesthetic preferences.

The physical features that constitute the setting of a historic property can be either natural or manmade, including such elements as: topographic features (a gorge or the crest of a hill); vegetation; simple manmade features (paths or fences); and relationships between buildings and other features or open space.

These features and their relationships should be examined not only within the exact boundaries of the property, but also between the property and its surroundings. This is particularly important for districts.³

However, for the Kaua'i Belt Road, understanding its setting moves beyond mere physicality; additional sensory elements, including sounds and a dynamic landscape, are integral to understanding how setting informs its significance. This approach to significance requires evaluating a historic property like the Kaua'i Belt Road with an understanding that associative values, which help define a property's significance, are sometimes intangible and often require looking beyond the physical built elements comprising the historic property or its immediate surroundings.⁴

Although much of the Kaua'i Belt Road exhibits a seemingly static setting—replete with lush mountains, wide valleys, ocean views, and small towns—in reality, its setting is a sensory experience in a constantly evolving environment. Vantage points along the roadway allow communities' residents, including fishermen and surfers, the ability to gauge conditions on the water that constantly change due to tradewinds that blow in from the Pacific Ocean and bring passing showers or storms of varying magnitude. The impact of these continuous and unpredictable rainfall events led early Hawaiians to develop over 200 words for the different types of rain that fell across the islands. Because the rains themselves featured their own dynamism, some rain names are specific to Kaua'i and all are "descriptive and highly nuanced."⁵ Determining the rain type is one way communities are able to discern whether flooding risks exist: community members will observe ridge and mountain sections near the Kaua'i Belt Road to seek out waterfalls, often harbingers of flooding intensity.⁶ The Kaua'i Belt Road's numerous

³ National Park Service, "How to Apply the National Register Criteria for Evaluation," National Register Bulletin, 1997.

⁴ Susan West Montgomery, "Significance Is Always Intangible: An Interview with the Keepers of the National Register," Forum Journal, vol. 31, no. 1-2, Fall 2016/Winter 2017.

⁵ Matthew Dekneef, "Hawaiians Have More Than 200 Words for Rain," Hawai'i Magazine, March 4, 2016.

⁶ Dan Wheat, "Challenges in Paradise," Capital Press, November 15, 2013.

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streams and rivers notoriously flood the roadway during times of heavy rain, making travel conditions difficult or impossible at times, and mudslides caused by intense rain events continue to shape the landscape, eroding cliff faces and ridges that sometimes destroy sections of the Kaua'i Belt Road.

Sounds along the Kaua'i Belt Road add to the setting's sensory experience. Sea breezes and crashing waves are interspersed by shallow streambeds or periodic waterfalls. Communities along the Kaua'i Belt Road vary between bustling and quiet depending on the day of the week. In agricultural areas, mooing cows in roadside fields or humming farm equipment emphasize the North Shore's rural nature. The roadway itself adds to the surrounding setting's auditory characteristics: tires moving across gravel roadside pull-offs, flanking grasses rustling from passersby, and queuing cars waiting for an opportunity to cross over Hanalei Bridge's audible timber planks. Combined, these elements create a setting that is anything but static to its communities and visitors.

Kaua'i Belt Road and the North Shore Cultural Landscape⁷

The 2004 NRHP registration form also alludes to the Kaua'i Belt Road featuring "one of Hawai'i's finest opportunities to view traditional cultural landscapes." The National Park Service defines a cultural landscape as "a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values."⁸ This overarching term is further divided into four types of cultural landscapes, and a single cultural landscape may include one or several of these subtypes: historic designed landscape, historic vernacular landscape, historic site, and ethnographic landscape. Kaua'i's North Shore is both an ethnographic landscape, containing natural and cultural resources that represent the heritage of associated persons, as well as a historic vernacular landscape demonstrating the land's evolution through various uses and people who shaped the landscape.

The Kaua'i Belt Road is one character-defining feature within the North Shore cultural landscape and is a conduit for understanding its development and exploring its historic and cultural attributes that extend over hundreds of years. Significant areas reached by the road include archaeological sites such as the Hā'ena Archaeological Complex (NRHP No. 84000257), which is important for its prehistoric and historic Hawaiian features and connection to Hawaiian

⁷ A full study of the North Shore cultural landscape is beyond the scope of this NRHP update. It is recommended that a Cultural Landscape Report be prepared to document the North Shore and all character-defining features as part of a greater land use management plan or update of the existing Kaua'i General Plan or North Shore Development Plan.

⁸ National Park Service, "Defining Landscape Terminology," Guidelines for the Treatment of Cultural Landscapes, available at <https://www.nps.gov/tps/standards/four-treatments/landscape-guidelines/terminology.htm>; Charles A. Birnbaum, "Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes," National Park Service Technical Preservation Service, Preservation Brief 36, September 1994.

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narratives involving Pele, Hi'iaka, and Lohi'au.⁹ The district contains evidence of long-term Hawaiian coastal habitation and a transition to an agrarian livelihood. Agricultural expansion occurred within the Halale'a moku where lo'i (holding ponds) irrigated kalo (taro), a staple of the Hawaiian diet with significance in Hawaiian stories.¹⁰ Although the post-contact period expanded agricultural production to a variety of crops in this area, notably rice, taro is still grown across the North Shore and is easily viewed from the Kaua'i Belt Road in one of the State's premier taro growing regions.

Although modern incursions have occurred on the North Shore, the Kaua'i Belt Road's relatively later construction, beginning in the early 1900s and not significantly improved until Hanalei Bridge's erection in 1912, had a limiting effect on development in the first decades of the twentieth century. As a result, the Kaua'i Belt Road also provides access to the North Shore's largely unaltered landscape and previously identified historic properties that survive to the present. These include the Haraguchi Rice Mill (NRHP No. 83000252), Hanalei Pier (NRHP No. 79000757), and the Wai'oli Mission District (NRHP No. 73000676), the site of an early post-contact permanent mission on Kaua'i. The North Shore has the potential to yield still undiscovered historic or prehistoric period historic properties: as recently as 2021, a landslide near the Hanalei Bridge exposed tunnels that led to the site of a former mill near the Hanalei River.¹¹ These prehistoric and historic properties and landscape elements are inextricably tied to and are character-defining features of the North Shore's cultural landscape, within which lies the Kaua'i Belt Road.

Collectively, these elements comprise the setting of the Kaua'i Belt Road.

Contributing and Noncontributing Resources

The Kaua'i Belt Road's contributing resources are those from the district's period of significance that relate to the road's significance and retain sufficient integrity, which is the ability of a property to convey significance. Additionally, NRHP guidance directs contributing and noncontributing counts to include resources of substantial size and scale. As a result, minor roadway elements including small pull-offs and minor culverts are not included in the resource count. Altered resources that are able to convey significance because they were repaired, rehabilitated, or replaced following the Secretary of the Interior's Standards for the Treatment of Historic Properties or the 2005 *Kūhiō Highway (Route 560) Historic Roadway Corridor Plan* are considered contributing. The following list of resources identifies their contributing and

⁹ Ka 'imi Na'auao O Hawai'i Nei Institute, "The Heiau Complex at Ke'e, Kaua'i," available at <https://kaimi.org/education/the-heiau/>, 2003.

¹⁰ Impact Assessment, Inc., Fishing, Seafood, and Community Research in the Main Hawaiian Islands: A Case Study of Hanalei Bay, Kaua'i, State of Hawai'i Department of Land and Natural Resources, Division of Aquatic Resources, May 2012, 22; Ligaya Mishan, "On Hawai'i, the Fight for Taro's Revival," New York Times, November 8, 2019.

¹¹ ASM Affiliates, Archaeological Inspection and Assessment of Flood- and Landslide-Related Damage along a Portion of the Kauai Belt Road (North Shore Section) National Register of Historic Places (NRHP) Historic District, May 13, 2021.

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noncontributing status and provides resource notes to assist in evaluating significance and integrity.

Kaua'i Belt Road, Princeville to Hā'ena

Contributing

MP 0 – 10

The Kaua'i Belt Road, Princeville to Hā'ena is one contributing site within the Kaua'i Belt Road (North Shore Section) historic district. The narrow two-lane road winds along the North Shore on its original alignment, lacks shoulders, features intermittent small pull-offs, and connects communities along its route. Constructed beginning in 1900, the roadway was modified over the years to repair the travel surface; it was extended to reach its current termination at Kē'ē Beach by 1926.

Hanalei Valley Scenic Overlook

Contributing

MP 0

The Hanalei Valley Scenic Overlook is one contributing site within the historic district. It is a wide pull-off and overlook area that provides views of Hanalei Valley and the Hanalei National Wildlife Refuge. It is lined by a timber rail and features signage describing the overlook and its views. The overlook existed by the 1910s and was used as a vehicle pull-off prior to 1950.

Hanalei Bay Overlook

Contributing

MP 0.5

The Hanalei Bay Overlook is one contributing site within the historic district. It is a wide, paved pull-off lined with a W-beam guardrail that provides views toward Hanalei Bay. The overlook predates 1950.

Hanalei Grade

Contributing

MP 0.5 – 1

The Hanalei Grade is one contributing structure within the historic district. It is a modest grade down Hanalei Hill made possible due to a cut slope against the hill. The grade was constructed in approximately 1911-1912 and eliminated a series of road switchbacks that formerly led from Hanalei Hill to the Hanalei River. The Hanalei Grade is currently undergoing repairs following a landslide that occurred in March 2021; these repairs are expected to stabilize the hillside while maintaining the Hanalei Grade on its original alignment and at its current grade.

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Hanalei Bridge

Contributing

MP 1.2

The Hanalei Bridge is one contributing structure within the historic district. The bridge is a 113-foot, single-span, single-lane bridge with a superstructure comprising a steel Pratt through truss and Warren truss. Its substructure features concrete abutments while timber decking carries the roadway along the bridge. The bridge was originally constructed in 1912 and upgraded in 1934; the Warren truss was added in 1967. Often viewed as the gateway to the North Shore, the bridge underwent repairs in 1973 and was determined individually eligible for listing in the NRHP in 1978. It again was repaired in 1980 and rehabilitated in 1988. In 2002-2003, the bridge underwent an extensive rehabilitation in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Culvert #1

Contributing

MP 2

Culvert #1 is one contributing structure within the historic district. It is a large, concrete box culvert approximately 15 feet long that was constructed prior to 1950.

Culvert #2

Contributing

MP 2.4

Culvert #2 is one contributing structure within the historic district. It is a large, concrete box culvert approximately 17 feet long with concrete headwalls that modestly rise above the roadbed. It was constructed prior to 1950.

Culvert #3

Contributing

MP 2.6

Culvert #3 is one contributing structure within the historic district. It is a large, concrete box culvert approximately 17 feet long with concrete headwalls that modestly rise above the roadbed. Its stream channel is lined with lava rocks. The culvert was constructed prior to 1950.

Wai'oli Bridge

Contributing

MP 3.4

Wai'oli Bridge is one contributing structure within the historic district. The bridge is a three-span, single-lane concrete bridge that extends 90 feet across Wai'oli Stream atop concrete bents and abutments. It is lined with concrete sidewalls covered with concrete coping. An original

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timber bridge was built at this location in 1904 and replaced in 1912 by the existing concrete bridge. It was determined eligible for listing in the NRHP in 1978. In 2019, the bridge was rehabilitated following the Secretary of the Interior's Standards for the Treatment of Historic Properties using a reinforced fiberglass wrap to provide additional strength to the bridge and increase its load limit while preserving its historic, concrete appearance.

Waipā Bridge

Contributing

MP 3.9

The Waipā Bridge is one contributing structure within the historic district. The bridge is a single-lane, three-span reinforced concrete bridge with concrete bents and abutments that extends approximately 140 feet across Waipā Stream. The original timber bridge at this location was constructed in 1904, replaced in 1912 with a concrete bridge that collapsed in 1919, and modified through an extension in 1925. The bridge's design and replacement in 2019 followed consultation with Section 106 consulting parties and adherence to the 2005 *Kūhiō Highway (Route 560) Historic Roadway Corridor Plan*, which balances user safety with historic preservation interests. The result is a new bridge that reflects design considerations of its predecessor, maintains the Kaua'i Belt Road location over Waipā Stream, and retains the feeling and association of the Kaua'i Belt Road within the North Shore.

Waikoko Bridge

Contributing

MP 4.2

The Waikoko Bridge is one contributing structure within the historic district. The bridge is a single-lane, single-span reinforced concrete bridge on concrete abutments that extends approximately 70 feet across Waikoko Stream. The original bridge at this location was built in 1904, replaced in 1912 with a concrete bridge, and repaired in 1946 after partially collapsing. Like the Waipā Bridge, the Waikoko Bridge's design and replacement in 2019 followed consultation with Section 106 consulting parties and adherence to the 2005 *Kūhiō Highway (Route 560) Historic Roadway Corridor Plan*, which balances user safety with historic preservation interests. The result is a new bridge that reflects design considerations of its predecessor, maintains the Kaua'i Belt Road location over Waikoko Stream, and retains the feeling and association of the Kaua'i Belt Road within the North Shore.

Lumaha'i Bridge

Noncontributing

MP 6

The Lumaha'i Bridge is one noncontributing structure. It is an eight-span, two-lane, reinforced concrete bridge with concrete bents and steel railings that extends 535 feet across the Lumaha'i River. The original steel bridge over the river was built in 1905, reinforced in the 1920s, and collapsed in 1967. The replacement bridge, the existing Lumaha'i Bridge, was constructed off

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the original Kaua'i Belt Road alignment and with two lanes. Because it does not follow the original design characteristics of the Kaua'i Belt Road, it is noncontributing.

Wainiha Bridge #1
Noncontributing
MP 6.5

Wainiha Bridge #1 is one noncontributing structure. It is a single-span, single-lane, temporary, modular steel truss ACROW bridge approximately 40 feet long. The original timber bridge at this location was constructed in 1904 and destroyed and replaced twice: in 1946 and 1957. The 1957 bridge was replaced in 2007 with the existing temporary ACROW bridge. Because the bridge is temporary, it is noncontributing.

Wainiha Bridge #2
Noncontributing
MP 6.7

Wainiha Bridge #2 is one noncontributing structure. It is a single-span, single-lane, temporary, modular steel truss ACROW bridge approximately 80 feet long. The original bridge at this location was constructed after 1922 and later destroyed and replaced in 1957. The 1957 bridge was replaced in 2004 with the existing temporary ACROW bridge. Because the bridge is temporary, it is noncontributing.

Wainiha Bridge #3
Noncontributing
MP 6.7

Wainiha Bridge #3 is one noncontributing structure. It is a single-span, single-lane, temporary, modular steel truss ACROW bridge approximately 150 feet long. The original timber bridge at this location was constructed in 1904 and later replaced in 1918. It was repaired in 1946 and partially destroyed in 1957, leading to replacement of one of its spans that year; the span was eventually replaced in 1966. The existing ACROW bridge replaced the 1957-1966 bridge in 2007 along with Wainiha Bridge #1. Because the bridge is temporary, it is noncontributing.

Hā'ena Bridge #1
Contributing
MP 7.5

Hā'ena Bridge #1 is one contributing structure. The 1926 bridge is a single-lane, single-span concrete bridge on concrete abutments featuring low concrete sidewalls. It is approximately 11 feet long and crosses over a small stream.

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Hā'ena Bridge #2

Noncontributing

MP 8.6

Hā'ena Bridge #2 is one noncontributing structure. The 1926 bridge is a two-lane, single-span concrete bridge on concrete abutments and rubble masonry wingwalls. The bridge was altered in the 1980s and features W-beam guardrails that replaced its original concrete sidewalls. Due to these alterations, the bridge no longer retains the design characteristics of the Kaua'i Belt Road and is therefore noncontributing.

Mānoa Ford

Contributing

MP 8.8

Mānoa Ford is one contributing structure. The concrete ford crossing, which allows Mānoa Stream to flow over the roadway, was constructed c. 1928 as part of improvements undertaken to extend the road to Kē'ē Beach. It was repaired in-kind following the April 2018 storm and flood event.

Limahuli Culvert

Contributing

MP 9.6

Limahuli Culvert is one contributing structure. It is a single-lane, two-span, concrete slab culvert with rubble masonry wingwalls and pier. The culvert was repaired in-kind following the April 2018 storm and flood event.

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8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- ☒ A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- ☐ B. Property is associated with the lives of persons significant in our past.
- ☐ C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- ☐ D. Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

- ☐ A. Owned by a religious institution or used for religious purposes
- ☐ B. Removed from its original location
- ☐ C. A birthplace or grave
- ☐ D. A cemetery
- ☐ E. A reconstructed building, object, or structure
- ☐ F. A commemorative property
- ☐ G. Less than 50 years old or achieving significance within the past 50 years

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Areas of Significance

(Enter categories from instructions.)

Conservation

Period of Significance

1900-2019

Significant Dates

Significant Person

(Complete only if Criterion B is marked above.)

Cultural Affiliation

Architect/Builder

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Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

The Kaua'i Belt Road's 2004 NRHP registration form identifies significance under Criteria A and C at the state and local levels in the areas of engineering, transportation, social history, and commerce. A review conducted as part of this update concludes that the Kaua'i Belt Road retains sufficient integrity to still include those areas of significance despite roadway modifications occurring after 2002. The 2004 NRHP registration form should be referenced for justification of the initial period of significance, levels and areas of significance, and historic context.

An additional area of significance at the State and local level, conservation, is described in this documentation as a result of substantial historic preservation efforts occurring since the 1970s. Because these efforts have continued to the present, the period of significance for the Kaua'i Belt Road extends from 1900, the year the Territorial Public Works Department commenced roadway improvements, through 2019, the most recent year significant construction occurred on the roadway. Evaluation under Criteria Consideration G is not required because a majority of district resources are more than 50 years of age and able to convey significance during the property's period of significance. Information provided here is intended to supplement the 2004 NRHP registration form.

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

Conservation

Conservation is defined by the NRHP as "the preservation, maintenance, and management of natural or manmade resources." Following proposals to replace the Hanalei Bridge and modify the Kaua'i Belt Road in the 1970s, community advocacy for the Kaua'i Belt Road's unique design has continued through the present. Major improvement projects to contributing resources along the road, including bridge replacements, have been and are currently being conducted with a preservation-minded approach and reliance on the Secretary of the Interior's Standards for the Treatment of Historic Properties. Continued documentation of the roadway and implementation of the 2005 *Kūhiō Highway (Route 560) Historic Roadway Corridor Plan* have given the State, county, and local communities important historical information and has resulted in a context-sensitive design approach to protecting and maintaining the Kaua'i Belt Road's character-defining features. Threats to the Kaua'i Belt Road's preservation are unambiguous: major weather events in recent years, including a devastating storm event in April 2018, highlight one of several potential future problems this historic roadway will likely encounter as the planet's climate continues to change and local communities continue to rely heavily on this historic property.

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Integrity Evaluation

The Kaua'i Belt Road (North Shore Section) retains integrity of location, design, setting, feeling, and association. Importantly, the road maintains its historic alignment and integrity of *location* through Kaua'i's North Shore communities. Since the 1970s, North Shore residents and advocacy organizations have prioritized retention of specific roadways elements, particularly single-lane bridges, a narrow road width, and various pull-offs to retain its integrity of *design*. The Kaua'i Belt Road's integrity of design is further sustained by the 2005 *Kūhiō Highway (Route 560) Historic Roadway Corridor Plan*, a planning document crafted by HDOT and community members to provide user safety while preserving the roadway's unique design characteristics. As the Kaua'i Belt Road traverses the North Shore, it travels through communities; over and around ridges and streams; into agricultural, historic, and cultural areas; and around bends that afford users ocean, valley, and mountain views. This landscape has been preserved despite a century of development along the North Shore, retaining the roadway's integrity of *setting*, an important aspect in understanding and interpreting the roadway's significance. The roadway retains important features to convey its significance within the greater North Shore cultural landscape, and therefore retains its integrity of *feeling* and *association* as a vital rural and historic roadway that connects communities between Princeville and Hā'ena.

Historic Context

Tourism and the Kaua'i Belt Road

Following World War II, Kaua'i's economy began a steady transition away from historic crops, notably sugar, that played an important role on the island. Tourism began to fill the void left by sugar plantations: air travel beginning in the 1950s brought more visitors to Hawai'i than ever before, and by 1960, the Kaua'i Surf Hotel opened at Kalapaki Beach in Lihue to become the first major hotel constructed on the island.¹² Tourism continued to increase as movies like Elvis Presley's *Blue Hawai'i* and other films further invited visitors to Hawai'i with idyllic images of sandy beaches and swaying palms.

Tourism also drew those wishing an escape from the mainland. In the late 1960s, young people from the mainland came to Kaua'i's North Shore and established a small outpost called Taylor Camp on a beach near Limahuli Stream at present-day Hā'ena State Park. The land was owned at the time by Howard Taylor, the brother of actress Elizabeth Taylor, and he invited these anti-war protestors to the land where they built treehouses and other facilities at the site. This group attracted numerous like-minded individuals who flocked to the free-spirit and free-love vibe that permeated through Taylor Camp and eventually reached a population of around 100. The State of Hawai'i condemned Howard Taylor's land by 1972 though the community persisted until 1977.¹³ Many descendants from Taylor Camp still live on the North Shore.

¹² Christine Hitt, "The Rise and Fall of the Legendary Coco Palms Hotel," *Hawai'i Magazine*, June 24, 2016; Hank Soboleski, "Old Kalapaki Recalled at the Opening of the Kaua'i Surf Hotel," *Garden Island*, June 4, 2017.

¹³ Susan Span, "Flower Children on the North Shore of Kaua'i," *Smithsonian Magazine*, July 9, 2012.

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The 1970s saw further tourism as pressure to grow the industry increased following sugar plantation closures across Kaua'i. The number of visitors to the island increased by 400,000 over the span of a decade to reach approximately 800,000 per year. The growing interest in Kaua'i and the North Shore both as a tourist destination and as a place to live prompted new development on Kaua'i and strained its rural roadways; protests soon followed.¹⁴

Early Preservation Efforts and the Hanalei Roads Committee

In the mid-1970s, HDOT proposed a two-lane replacement of the Hanalei Bridge at a location 500 feet from the original bridge. Public hearings held in 1974 and 1975 as part of the environmental review process for the National Environmental Policy Act (NEPA) allowed residents of nearby communities an opportunity to share thoughts and concerns with HDOT's proposal. A pressing concern frequently shared was future growth and development on the North Shore spurred by a new and widened Hanalei Bridge that could result in a further influx of tourists and tour buses. These concerns and challenges to HDOT's environmental process resulted in the agency studying wider project impacts for the entire North Shore and proposed replacements for the Kaua'i Belt Road's single-lane bridges. Once again, public outcry against substantial alterations to the Kaua'i Belt Road and its bridges came from the community amid an effort to preserve the rural nature of the road. Concurrently, the Kaua'i Historical Society prepared NRHP nomination forms for all of the North Shore bridges including the Hanalei Bridge. FHWA requested a formal eligibility determination from the Keeper of the National Register who determined that the Hanalei, Wai'oli, and Waipā Bridges were eligible for listing in the NRHP. As a result, FHWA and DOT proceeded to only repair the single-lane bridges and instead widen the Kūhiō Highway from Princeville to Kalihiwai.¹⁵

An important voice in these early preservation advocacy efforts was the North Shore Belt Road Citizens Advisory Committee. Formed in the mid-1970s with 86 Kaua'i residents and originally chaired by founding member Carol Wilcox, the group formed to oppose tour buses on the North Shore and protest plans to demolish the Hanalei Bridge. After learning more about the Kaua'i Belt Road, the group's emphasis shifted to the roadway and efforts to maintain its look and feel.¹⁶ Consequently, the advocacy group renamed itself the Hanalei Roads Committee.¹⁷ According to one scholar, the Hanalei Roads Committee was the first such group in Hawai'i that advocated for preservation of historic roadway corridors and scenic byways.¹⁸ The Hanalei Roads Committee, and communities along the North Shore, viewed the Hanalei Bridge as a "gateway to the North Shore, a cultural resource that helped define their district and distinguish it

¹⁴ Christopher Leland Cook, "Kaua'i in History: A Guide to the Resources (Excerpt, Kaua'i: An Historical Overview)" (Honolulu: History and Humanities Program of the State Foundation on Culture and the Arts/Kaua'i Historical Society, 2000), xvi; Laurent Canalejas, "Hanalei Bridge Turns 100," Garden Island, August 24, 2012.

¹⁵ Wilson Okamoto & Associates, Inc., Final Environmental Assessment, Kūhiō Highway, Remove/Repair/Replace Metal Members, Hanalei District, Kaua'i, Hawai'i, January 2020.

¹⁶ Anthony Sommer, "North Shore Highway on Kaua'i Gains Protection," Honolulu Star-Bulletin, April 23, 2004.

¹⁷ Meeting Minutes, Kaua'i Planning Commission, November 12, 2019.

¹⁸ Dawn E. Duensing, *Hawai'i's Scenic Roads: Paving the Way for Tourism in the Islands* (Honolulu: University of Hawai'i Press, 2015), 256.

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from other places in Hawai'i." The organization is committed to maintaining the roadway's rural characteristics, its single-lane bridges, historic features, and "perpetuate Hanalei's 'slow pace of life and friendliness.'"¹⁹

The Kaua'i Belt Road's historic preservation victories of the 1970s were once again challenged in the 1980s. HDOT again began preparations to replace Hanalei Bridge, and after years of public consultation and efforts by the Hanalei Roads Committee, HDOT in 1988 agreed to repair rather than replace Hanalei Bridge. Repair work included strengthening bridge members comprising the trusses and separating floor beam connections in order to transfer loads to the bridge's Warren trusses. These consultation efforts resulted in another major historic preservation victory in 1989 when HDOT restored the Hanalei Bridge rather than replacing it.²⁰

Following the repairs, a bridge inspection and load test determined the bridge safe; however, the Pratt trusses suffered from years of deterioration and could no longer carry loads as originally intended. A public meeting held in 1999, where HDOT shared various alternatives for bridge repair or replacement, garnered support for preserving the look of the Hanalei Bridge because it acted as a "gateway" to the rural lifestyle characteristic of the North Shore" important to its residents and visitors.²¹

By the 2000s, HDOT undertook an extensive rehabilitation of the Hanalei Bridge, the first major repairs to the structure since the 1980s rehabilitation project. The 1912 bridge, a Pratt truss with a Warren truss section dating from the 1960s, received replacement members to replicate the early Pratt truss section while repairing the 1960s Warren truss. The push to replace members in-kind and preserve the Hanalei Bridge came again from the Hanalei Roads Committee, who received the Historic Hawai'i Foundation Preservation Honor Award for their efforts.²² Wilson Okamoto Corporation completed the engineering for the 2002-2003 Hanalei Bridge reconstruction; the firm's ability to respond to historic considerations while providing a modern and structurally sound bridge earned the firm an FHWA and FTA 2004 Transportation Planning Excellence Awards Honorable Mention.²³ At the local level, the project was also viewed as a success: in-kind repairs made to the Hanalei Bridge's Pratt trusses allowed the single-lane bridge to retain its position as a historic and important community landmark. Residents viewed preserving the one-lane truss bridge as a means to prevent unnecessary traffic and overdevelopment of the North Shore and maintain its idyllic, naturalistic, and serene characteristics.²⁴

¹⁹ Ibid., 256.

²⁰ Meeting Minutes, Kaua'i Planning Commission, November 12, 2019.

²¹ Wilson Okamoto & Associates, Inc., Final Environmental Assessment, Kūhiō Highway, Remove/Repair/Replace Metal Members, Hanalei District, Kaua'i, Hawai'i, January 2020; Duensing, Hawai'i's Scenic Roads, xi.

²² Chris Cook, "Robeson, Wilcox Honored for Preserving Hanalei Bridge," Garden Island, May 15, 2003.

²³ "Good Old Hanalei Bridge," Garden Island, October 3, 2004.

²⁴ Laurent Canalejas, "Hanalei Bridge Turns 100," Garden Island, August 24, 2012.

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In May 2012, Historic Hawai'i Foundation once again awarded the Hanalei Roads Committee with the Preservation Honor Award for their advocacy efforts in preserving the Kaua'i Belt Road's single-lane bridges.²⁵

Listing in the National Register of Historic Places

When enacted on October 15, 1966, the National Historic Preservation Act (NHPA) (Public Law 89-665; now codified at 54 U.S.C. § 300101, et seq.) established a national register (National Register of Historic Places or NRHP) to document districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, and culture. Additionally, Section 106 of the NHPA requires federal agencies to take into account the effect of their actions on properties listed in the NRHP; later amendments to the NHPA included properties eligible for listing in the NRHP. The Section 106 review process and its implementing regulations 36 C.F.R. § 800, provide for public oversight and consulting party input on federal projects that may affect historic properties. As a result, State Historic Preservation Offices (SHPO), advocacy organizations, and members of the public have pursued NRHP listing or eligibility determinations for properties nationwide, leading to over one million listed properties. Efforts in the 1970s to recognize the Kaua'i Belt Road as historic helped advance its eventual listing in the NRHP.

The Hanalei Roads Committee pursued formal NRHP listing as a means to protect and maintain the Kaua'i Belt Road and prevent efforts to widen or alter the road. The NRHP registration form for Kaua'i Belt Road (North Shore Section) was completed in April 2002 and entered into the State Register of Historic Places (SRHP) on March 29, 2003 and the NRHP on February 11, 2004. The documentation created the Kaua'i Belt Road (North Shore Section) historic district, which is the only intact example of Hawai'i's belt road system on Kaua'i. Its historic property boundaries include HDOT right-of-way along Kūhiō Highway (Route 560) from mile marker 0 in Princeville to mile marker 10 at Hā'ena State Park and has a documented period of significance from 1900 to 1957. The registration form identifies two contributing sites, thirteen contributing structures, and historic significance under Criteria A and C and Criteria Consideration G for its association with transportation, commerce, social history, and engineering significance. Its listing in the NRHP in 2004 was the culmination of a 28-year effort by the Hanalei Roads Committee and local advocacy groups for formal recognition and documentation of the Kaua'i Belt Road.²⁶

Kūhiō Highway (Route 560) Historic Roadway Corridor Plan

Another important document created to preserve the Kaua'i Belt Road was the *Kūhiō Highway (Route 560) Historic Roadway Corridor Plan*. The planning document was developed among HDOT and community members to maintain the Kūhiō Highway's rural and historic character-defining features using context sensitive design and input from public outreach initiatives while

²⁵ Historic Hawai'i Foundation, "Emergency Repairs to Kaua'i Belt Road Will Retain and Strengthen Wai'oli Bridge, Demolish Two Other Historic Bridges," August 17, 2018.

²⁶ Anthony Sommer, "North Shore Highway on Kaua'i Gains Protection," Honolulu Star-Bulletin, April 23, 2004.

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applying safety standards for users. Importantly, the plan recognizes the Kūhiō Highway as a rural-historic road, and as a result, provides design guidelines and consultation procedures for HDOT to follow.²⁷

By this time, North Shore communities recognized the Kaua'i Belt Road as more than a historic roadway; preserving its existing single-lane bridges and narrow width became integral to maintaining their lifestyle by limiting overuse and overdevelopment. The Hanalei Roads Committee too noted that "the one-lane bridges...create a sense of friendliness and slowness on the North Shore."²⁸ However, despite proposals to further limit tourists, such as banning tourists from driving on the North Shore and requiring they use a system of shuttle buses, tourism continued to cause strife between the local community and visitors.

Alterations to the Kaua'i Belt Road, 2002-2017

The 2004 NRHP registration form for the Kaua'i Belt Road describes alterations to the roadway and its contributing and noncontributing resources from 1900 through 2002, the year when the existing NRHP registration form was completed. While the documentation notes that "the road itself no longer features original construction materials," it importantly offers that "other aspects of the route, especially the original alignment, location, rural coastal setting, and narrow width are important features that contribute to the road's integrity." While this broad recognition of character-defining features allows for some design flexibility, alterations have continued to occur to the roadway that sometimes cause challenging balances between user safety and historic preservation.

Guardrails and Walls

In 2002, HDOT proposed \$2.4 million in road maintenance activities for the Kaua'i Belt Road segment between Princeville and Hā'ena State Park. Initial plans proposed extensive guardrail replacement, including replacement of wood rails with metal w-beam guardrails totaling 17,000 feet. Although metal guardrails eventually were installed in some locations, HDOT reduced the extent to which these railings would line the roadway to 7,200 feet. The Hanalei Roads Committee led efforts to limit the changes to the road.²⁹ Additional intermittent sections of guardrail have been added along the Kaua'i Belt Road since 2002. Notably, the guardrails are colored brown to help obscure their appearance.

²⁷ The Kūhiō Highway (Route 560) Historic Roadway Corridor Plan, as written, expires in 2030 ("The HDOT Kaua'i District office will specifically use this document as a working plan to provide the necessary direction for current and long-term actions regarding preservation, rehabilitation, restoration, reconstruction and improvement, and repair and maintenance work on Route 560 over the next 25 years"). Its continued use is vital to continuing the positive working relationship between HDOT and local communities, implementing context-specific user safety measures along the roadway, and encouraging positive historic preservation outcomes for the roadway.

²⁸ Anthony Sommer, "North Shore Highway on Kaua'i Gains Protection," Honolulu Star-Bulletin, April 23, 2004.

²⁹ Jan TenBruggencate, "Road Guardrail Issue Galvanizes Hanalei," Honolulu Advertiser, August 8, 2002; Lester Chang, "Hanalei Roads Committee against DOT Plan for North Shore Road," Garden Island, November 5, 2002.

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In 2011, HDOT constructed a section of concrete wall on the makai side of the roadway near Lumaha'i Beach. The low wall borders a pull-off area and was designed to give the appearance of rocks. Construction of the wall resulted in a loss of timber railings in this area.

Wainiha Bridges

When the 2004 NRHP registration form was completed, the three 1957 Wainiha Stream bridges, provided numerical designations of #1, #2, and #3, comprised unique steel-and-wood through-truss structural systems. Shortly thereafter, Wainiha Bridge #2's structural system began deteriorating, resulting in a downgrade to a 6-ton limit. HDOT engineers identified buckling on the deck later that year, which necessitated plans to replace the bridge. By this time, HDOT had also downgraded Wainiha Bridges #1 and #3 to 8- and 6-ton limits, respectively. The major cause identified for the damage to these bridges was likely trucks carrying construction equipment that exceeded the posted load limits.³⁰

HDOT installed a temporary ACROW panel bridge, which is a type of modular steel truss bridge, over the existing Wainiha Bridge #2 to allow continued access along Kūhiō Highway and over this portion of Wainiha Stream. The Wainiha Bridge #2 was removed in 2008. Hawai'i Dredging Co. assembled and set in place the ACROW bridge.

In 2007, Wainiha Bridge #3 also received severe damage likely caused by an oversized truck that exceeded the weight limits for the bridge. Load tests performed by HDOT on it as well as Wainiha Bridge #1 resulted in a reduced load limit of 3 tons. That same year, Governor Linda Lingle issued a proclamation that allowed for ACROW bridge installation for Wainiha Bridges #1 and #3. Prior to all three bridges' demolitions, Historic American Buildings Survey (HABS) and Historic American Engineering Record (HAER) documented the three bridges. Original abutments and piers remained.³¹

In 2017, HDOT prepared a Final Environmental Assessment for a project to replace the temporary Wainiha Bridges and rehabilitate the Kaua'i Belt Road. The project proposed to replace the three modular steel ACROW panel bridges spanning Wainiha Stream with single-lane bridges on the existing alignment similar to bridges that predated the ACROW bridges. This project was determined to have no adverse effect on historic properties, including the Kaua'i Belt Road. The Federal Highway Administration issued a Finding of No Significant Impact on January 12, 2018.³² The proposed bridge replacements received much attention from the community, and many opposed the project unless it adhered to the design of the 1957 Wainiha

³⁰ Anthony Sommer, "State Will Replace Rickety Bridge," Honolulu Star-Bulletin, September 23, 2004; "Nathan Eagle, "Dangerous Bridges to be Replaced," Garden Island, November 2, 2007.

³¹ AECOM Technical Services, Inc., Engineering Design Report for Kūhiō Highway, Rehabilitation of Wainiha Bridges, October 2012, pp 6-25.

³² HDOT, "Final Environmental Assessment/Finding of No Significant Impact, Project to Replace Temporary Wainiha Bridges (Replacement of the Temporary Wainiha Bridges and Rehabilitation of Kaua'i Belt Road, Kūhiō Highway, Halele'a District, Kaua'i Island, Hawai'i," Project No. HI STP SR560(1), December 2017.
<https://highways.dot.gov/federal-lands/projects/hi/wainiha>

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Stream bridges. However, project proponents aimed for a "context-sensitive approach" for the replacement Wainiha Stream's bridges that considered size, materials, and aesthetics.³³ As of Spring 2021, three temporary ACROW bridges still span the Wainiha Stream.

Storm and Flood Event, April 13-16, 2018

Extreme weather is not uncommon on Kaua'i. Since 2002, numerous small- and large-scale weather events have caused damage across the island, including portions of the North Shore. These episodes range from hurricanes that wreak havoc and cause severe flooding, winds, and dangerous surf, to sometimes unexpected rainfall events with devastating consequences. Hawai'i's unique position in the Pacific Ocean poses challenges to forecasting, making predictions for smaller-scale and isolated events extremely difficult and oftentimes resulting in no warnings for residents.³⁴

In early 2018, weather patterns that favored increased rainfall led to a prolonged wet season on Kaua'i. Heavy rain fell throughout February and March and included major storms on February 22 and March 14-15 that led to an overflowing Hanalei River and Kūhiō Highway's closure due to landslides. Although heavy rainfall in Kaua'i typically subsides by the end of the wet season in April, storms continued to inundate Kaua'i that month and led to the largest single-day rain event in United States history.³⁵

Beginning on April 11, an upper level low pressure system west of Kaua'i weakened and gave way to a weak, surface-based low-pressure trough that impacted the island chain beginning on April 13, leading to heavy rains on Oahu that day. A second and stronger upper level low pressure system then formed west of the initial system and impacted Kaua'i with a similar surface-based trough. National Weather Service data from the storm event indicates these troughs drew from tradewinds moisture and caused the torrential rainfall along Kaua'i's North Shore. Additionally, radar imagery showed that the Kaua'i storm clung to the North Shore's lower elevations and coast, unlike typical rainfall events on Kaua'i which impact the island's higher elevations.³⁶

Late on April 13, the first of several significant rain events occurred on Kaua'i's North Shore. Over the course of several hours, the rainfall led to closure of Kūhiō Highway at the Hanalei Bridge; however, the storms continued to move, and by 8:00 a.m. on April 14, Kūhiō Highway reopened at Hanalei Bridge. Approximately four hours later, rain once again fell, this time unrelenting and over the North Shore's lower elevations. Landslides near Wainiha again closed Kūhiō Highway, flooding destroyed two residences, and rushing waters washed out Wainiha

³³ Bethany Freudenthal, "Over 100 Oppose Wainiha Bridges Project," Garden Island, February 16, 2018.

³⁴ John Hill, "Here's Why the Weather Experts Didn't See the Kaua'i Storm Coming," Honolulu Civil Beat, April 19, 2018.

³⁵ Jessica Else, "The Flood – One Year Later," Garden Island, April 19, 2019; "Flash Flood Warning Issued for Kaua'i," Garden Island, March 14, 2018.

³⁶ National Weather Service, "Record Kaua'i and Oahu Rainfall and Flooding – April 2018," <https://www.weather.gov/hfo/RecordKauaiandOahuRainfallAndFlooding-April2018>.

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Powerhouse Road. It was not until 7:00 p.m. that evening when the downpour began to subside.³⁷

At approximately midnight on April 15, a second powerful storm began dumping 5 to 7 inches of rain per hour over a wide area from Kaua'i's higher elevations to the coast. The constant battering and idling storm caused a flash flood in the Hanalei River and buried sections of Kūhiō Highway beneath up to 8 feet of water.³⁸ Properties near the Wainiha River flooded due to extreme rising waters. By morning, the storm shifted slightly east and away from the North Shore; at around 8:00 a.m., most of the rainfall across northern and northeast Kaua'i subsided.³⁹

A third intense rainfall event began after 10:00 a.m. when rain bands intensified and centered over Kaua'i's North Shore, again extending from higher elevations to the coast. Kūhiō Highway flooded as the stationary rain band inundated the already saturated Hanalei River valley. By 1:00 p.m., the storms spread east and inundated other parts of Kaua'i, and around sunset, the storms finally dissipated.⁴⁰ Flood waters continued to rage and rise.

For the 48-hour period beginning April 13 at 6:00pm and ending April 15 at 6:00pm, 53.57 inches of rain fell at a gauge located at the Waipā Foundation in Hanalei. The gauge measured 49.69 inches of rain in the 24-hour period beginning just after noon on April 14 and ending at the same time on April 15. During that period, rain consistently fell at a rate of over 4 inches per hour, peaking at a rate of over 7 inches per hour. As a result, the 24-hour rainfall event at the Waipā Foundation gauge is currently the United States recordholder for wettest 24-hour period, breaking a 39-year record.⁴¹ According to United States Geological Survey (USGS) flood gauge data, the Hanalei River level rose to approximately 15 feet and discharged over 32,700 cubic feet of water per second at the gauge location before gauge transmissions to the USGS failed due to bank erosion.⁴² The days-long storm profoundly affected the island and its communities, residents, and the Kaua'i Belt Road.

State and Community Response

The multi-day storm proved devastating. Flood waters saturated numerous homes and destroyed many others; a house on Powerhouse Road in Wainiha completely lifted off its foundation and was washed downhill by the rushing waters. Cars were submerged, including overturned vehicles at Black Pot Beach and the Hanalei Pier. Escaped buffalo from a nearby ranch were found on the beach in Hanalei, pushed to the coast due to flood waters that engulfed the town. Extensive damage to Kūhiō Highway forced its closure, making rescue operations extremely challenging. The U.S. Coast Guard conducted helicopter evacuation operations with the Hawai'i National Guard and extensive local support to make between 15 and 20 land rescues for those trapped by

³⁷ Ibid.

³⁸ Else, "The Flood – One Year Later."

³⁹ National Weather Service, "Record Kaua'i and Oahu Rainfall and Flooding – April 2018."

⁴⁰ Ibid.

⁴¹ Else, "The Flood – One Year Later."

⁴² National Weather Service, "Record Kaua'i and Oahu Rainfall and Flooding – April 2018."

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rising waters. The fire department conducted rescues by jet ski and were seen by residents crossing through yards due to the high water level. Widespread power outages occurred across the North Shore and Wainiha lost its running water; many areas were under a "do not drink" order.⁴³

Residents rallied together to help those stranded by the flooding and landslides. Volunteers brought water and supplies by boat to areas inaccessible by road and helped evacuate people, and the Kaua'i Red Cross provided additional assistance and support to those evacuated or rescued. By Sunday morning April 15, over 40 people had sought shelter at the Hanalei School. Others who sought shelter at the Church of the Pacific were welcomed into parishioners' homes. Water donations came from Walmart and Big Save in Hanalei.⁴⁴

HDOT and the Kaua'i County Department of Public Works cleared landslides and debris throughout the storm; however, crews working to clear roads following the initial round of storms were forced to stop when the third storm arrived Sunday. Numerous sections of Kūhiō Highway closed due to landslides and flooding, including sections between Waikoko and Wainiha, between Princeville and the Hanalei Bridge, and at the Kalihiwai Bridge.⁴⁵

Governor Daniel Ige issued a state of emergency for Kaua'i which authorized state funds and provided resources for recovery efforts. Ige stated, "...we're coordinating help from around the state. Based on the county's needs, we may also bring in other state agencies like [the Department of Land and Natural Resources] to provide specialized skills and personnel. I especially want to recognize our Department of Transportation personnel." Kaua'i Mayor Bernard Carvalho, Jr., who also signed an emergency proclamation, mobilized local efforts led by the Kaua'i Emergency Management Agency. Adjutant General and Hawai'i Emergency Management Agency Director Arthur "Joe" Logan committed the Hawai'i National Guard to assist Kaua'i first responders while Hawai'i Emergency Management Agency Administrator Thomas L. Travis worked to have Oahu Emergency Management Agency provide additional assistance.⁴⁶

On Monday April 16, both Mayor Carvalho and Governor Ige toured the affected areas by helicopter, and the extent of the storm's damage became clear. In total, at least 220 people were evacuated by helicopter, 121 by bus, and others by boat. The Hawai'i National Guard deployed two UH-60 Black Hawk helicopters, two CH-47 Chinooks, eight zodiacs, and 45 soldiers and airmen to aid rescue efforts and deliver supplies. At least two houses were moved off foundations, four were completely destroyed, and countless others were damaged. Along Kūhiō

⁴³ Allan Parachini, "Kaua'i Storm: 28 Inches of Rain Brings Landslides, Floods and Wrecked Homes," Honolulu Civil Beat, April 16, 2018; "Home Destroyed, Highway Closed, North Shore Flooded," Garden Island, April 14, 2018 (with updates); Anthony Quintano, "Firsthand Accounts of Kaua'i North Shore Flooding Devastation," Honolulu Civil Beat, April 17, 2018.

⁴⁴ "Flooding of Epic Proportions: Homes Destroyed, Roads Closed, Many Rescued," Garden Island, April 16, 2018.

⁴⁵ "Home Destroyed, Highway Closed, North Shore Flooded," Garden Island, April 14, 2018 (with updates).

⁴⁶ "Flooding of Epic Proportions: Homes Destroyed, Roads Closed, Many Rescued," Garden Island, April 16, 2018. A federal disaster declaration occurred 3 weeks later.

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Highway, multiple landslides destroyed large sections of the roadway leaving entire communities isolated.⁴⁷

Emergency Repairs

In addition to clearing mudslides and debris, HDOT also designed plans to temporarily repair the roadway and allow passage through damaged sections, including areas that required slope stabilization in Wainiha and Waikoko. Due to the number of load-restricted bridges along Kūhiō Highway, use of smaller trucks was required for the initial road repairs.⁴⁸ A few days after the storm, a large segment of Kūhiō Highway between Waikoko and Wainiha was still closed on April 20 as bridges continued to be inspected.⁴⁹

Repair options varied in the days immediately following the storm. HDOT considered expediting previously planned bridge replacement projects for the three Wainiha Stream bridges. To facilitate bridge construction and Kūhiō Highway repairs, HDOT proposed constructing temporary bridges over or adjacent to the Wai'oli, Waikoko, and Waipā Bridges in order to handle a 25-ton load capacity and help facilitate roadway repairs. Proposed slope repairs would utilize mesh or concrete facing with anchors to stabilize vulnerable areas, with the mesh-covered areas allowing plantings; less visible areas or those that required reinforcing would utilize concrete.⁵⁰

Kūhiō Highway reopened for single-lane emergency access only on April 28, and the stretch from Waikoko to Wainiha reopened to residents and local traffic on May 4. However, Governor Ige and Mayor Carvalho urged visitors to avoid the North Shore and Kūhiō Highway due to ongoing repairs and recovery efforts. HDOT set road weight restrictions at 10,000 pounds and limited access using a set schedule and escort vehicles that would maintain low speeds and control traffic due to the ongoing repairs. Residents using the road were required to obtain placards to identify themselves as residents. Assistance for residents was made available through the Federal Emergency Management Agency.⁵¹

FHWA provided an initial \$8 million for emergency repairs to the stretch of Kūhiō Highway from Waikoko to Wainiha; however, initial costs were estimated at \$40 million and HDOT sought emergency relief funding for roadway repairs caused by the natural disaster.⁵² By early May, HDOT identified repairs for 26 locations along the Kūhiō Highway, including 17 slope areas, and needs for stabilizations, wall repairs, and debris cleanup. At mile 6.5, a substantial

⁴⁷ Allan Parachini, "Kaua'i: The Path to Recovery in Hanalei Will Be a Long One," Honolulu Civil Beat, April 17, 2018.

⁴⁸ "State Assesses Flood-Damaged Areas," Garden Island, April 19, 2018.

⁴⁹ "Hanalei Bridge Open Again; Flash Flood Watch Remains in Effect," Garden Island, April 20, 2018.

⁵⁰ Brittany Lyte, "Lifeline to Kaua'i's North Shore Must Be Rebuilt Now, Relocated Later," Honolulu Civil Beat, April 20, 2018.

⁵¹ "Kūhiō Highway from Waikoko to Wainiha to open to local traffic beginning Friday," Garden Island, May 3, 2018; "Federal Flooding Assistance Applications Invited to Kauai, Oahu Briefings," Garden Island, May 19, 2018.

⁵² Costs to repair Kūhiō Highway ultimately reached approximately \$80 million. Audrey Cleo Yap, "One Year after Historic Floods, Kaua'i Residents Cautiously Rebuild," NBC News, April 7, 2019.

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repair effort was required, however, bridge load limits prevented HDOT's repair equipment access the location. As a result, bridge replacements were identified as necessary solutions for accommodating HDOT's equipment to repair the road; full reopening of Kūhiō Highway would not be expected to occur until the Wai'oli, Waipā, and Waikoko Bridges were improved.⁵³ On May 3, recognizing the extent of repairs needed to the historic Kaua'i Belt Road, HDOT held the first of several Section 106 coordination meetings.⁵⁴

Section 106 Process

Because of the emergency nature of the required repairs, NHPA Section 106 consultation occurred quickly over the summer of 2018. Section 106 consulting parties included Hanalei Roads Committee, Historic Hawai'i Foundation, Hanalei Watershed Hui, Waikoko 'Ohana, Hui Ho'omalulu I Ka 'Āina, and the Konohiki Restoration Project. Early plans proposed by HDOT included a replacement Wai'oli Bridge, but through consultation with consulting parties, revised its plans to instead rehabilitate the bridge with a fiberglass reinforced plastic wrap that would strengthen its bents and allow for maintenance of the existing span's deck and railings. The wrap would appear similar to concrete and not visually add any massing to the bridge, meeting the Secretary of the Interior's Standards for the Treatment of Historic Properties.⁵⁵ However, for Waipā and Waikoko Bridges, the proposed fiberglass wrap was not able to be used for repairs, despite concerns by consulting parties and community members regarding the proposed loss of the bridges. In order to maintain the road's feeling, the replacement bridges were instead proposed to be single-lane bridges on the existing alignment that would be designed to incorporate the rural-historic standards set forth in the 2005 *Kūhiō Highway (Route 560) Historic Roadway Corridor Plan*.⁵⁶

Due to a FHWA Section 106 finding of adverse effect, parties to the Section 106 process entered into a memorandum of agreement entitled *Memorandum of Agreement among the Federal Highway Administration, the Hawai'i State Historic Preservation Officer, and the Advisory Council on Historic Preservation regarding the Kaua'i Emergency Flood Repairs and Cleanup at Various Locations April 2018, Districts of Halelea and Wailua, Kaua'i, Hawai'i* (MOA). Executed on October 17, 2018, the agreement stipulated HAER documentation for Waikoko and Waipā Bridge. Other stipulations of the MOA (Stipulations I, II and VII) concern utilizing the Secretary of the Interior's Treatment Standards and Guidelines and 2005 *Kūhiō Highway (Route 560) Historic Roadway Corridor Plan* for replacement, rehabilitation, and maintenance of other

⁵³ Historic Hawai'i Foundation, "Emergency Repairs to Kaua'i Belt Road Will Retain and Strengthen Wai'oli Bridge, Demolish Two Other Historic Bridges," August 17, 2018.

⁵⁴ HDOT, "North Kaua'i Emergency Flood Repairs, Section 106 Coordination Meeting," PowerPoint, May 3, 2018.

⁵⁵ The Secretary of the Interior's Standards for the Treatment of Historic Properties are codified at 36 C.F.R. § 68 and address the four recognized treatments to historic properties: preservation, rehabilitation, restoration, and reconstruction. Guidelines have been developed to assist practitioners in applying the standards. The choice of which treatment applies to a particular historic property is dependent upon "the property's significance, existing physical condition, the extent of documentation available and interpretive goals, when applicable. The standards will be applied taking into consideration the economic and technical feasibility of each project." 36 C.F.R. § 68.3.

⁵⁶ Historic Hawai'i Foundation, "Emergency Repairs to Kaua'i Belt Road Will Retain and Strengthen Wai'oli Bridge, Demolish Two Other Historic Bridges," August 17, 2018.

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bridges and features of the belt road. In addition to the bridge rehabilitation and two bridge replacements, other contributing resources of the Kaua'i Belt Road received in-kind repairs including Limahuli Culvert and Mānoa Ford. The MOA's Exhibit A included a list of emergency repairs to the Kaua'i Belt Road needed as a result of the 2018 storm event, while Exhibit B included the proposed bridge plans for the Waipā Bridge and Waikoko Bridge replacements and the Wai'oli rehabilitation.

Threats to Future Preservation of the Kaua'i Belt Road

The Kaua'i Belt Road (North Shore Section) portion of Kūhiō Highway fully reopened in June 2018 following delays caused by Hurricane Lane in 2018 and other weather-related events. Still, some local residents did not feel the North Shore was yet ready to receive an influx of visitors.⁵⁷ Just as tourists played a role in the initial threats to maintaining the historic road's narrow alignment and single-lane bridges, increased tourism and the popularity of Kaua'i's North Shore will continue to play a major role in the road's future.

The steady increase in tourism has drawn criticism from residents that overtourism is altering the communities' ways of life and the qualities that make the island unique. Just as interest in Kaua'i increased with aviation, the 2000s ushered in a new wave of visitors seeking an accessible escape, drawn to the North Shore through numerous internet and social media posts. Decades of increased visitors and vivid descriptions of the North Shore's slow pace and idyllic landscapes continue to draw mainlanders and international visitors. The Kaua'i Belt Road's closure to the public presented the North Shore's local communities with a sense of life without tourists and allowed residents to think strategically about the ever increasing number of visitors.⁵⁸

In 2018, the Kaua'i Visitors Bureau and Hawai'i Lodging and Tourism Association-Kaua'i acknowledged that the island had reached its capacity in terms of number of visitors. The groups' joint effort resulted in the Kaua'i Tourism Strategic Plan 2019-2021, which described changes to the tourism industry with the rise of private rentals and ride-sharing services.⁵⁹ One major improvement to limit overtourism was through restricting the number of visitors at Hā'ena State Park, aimed to limit North Shore traffic and eliminate parking at Kē'ē Beach. The State implemented a new reservation system, reserved spaces for locals, and constructed a new parking area at the state park that will require visitors to walk to Kē'ē Beach at the end of the

⁵⁷ Tanner Haworth, "Kauai's North Shore Prepares to Reopen Flood-Damaged Kūhiō Highway," *Hawai'i News Now*, June 7, 2019; "Protestors Briefly Block Kūhiō Highway," *Garden Island*, June 18, 2019.

⁵⁸ For example, see Meredith Bryan, "A Guide to Kaua'i's Magical North Shore," *Conde Nast Traveler*, June 9, 2016; Christopher Reynolds, "On Kaua'i's North Shore, Mother Nature Paints with Green," *Los Angeles Times*, April 18, 2014; "Paradise Found: The North Shore in Kaua'i," *Frommer's*, 2020.

⁵⁹ "'Overtourism' on Kaua'i," *Garden Island*, September 16, 2018.

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Kaua'i Belt Road.⁶⁰ Further calls have been made to adhere to the "Aloha Pledge," a set of guidelines for residents and visitors to allow for an amicable and enjoyable coexistence.⁶¹

Increased visitors to the North Shore also increased the burden of the island's disaster response capabilities. The Hanalei-Hā'ena community's loss of permanent residents, replaced instead by short-term rentals, made development of a clearer plan a necessity due to the sheer volume of visitors to the area. In response, the North Shore communities hired a consultant to develop a Hanalei-Hā'ena disaster response and recovery plan modeled on the Hawai'i Hazards Awareness and Resilience Program used elsewhere in the state. Led by Hanalei Watershed Hui and the Hanalei-Hā'ena Community Association, it builds upon an early plan from 2008 and furthers the area's resilience objectives during disaster events, such as hurricanes or tsunamis, and also considers discrete weather events like the April 2018 storm.⁶² New facilities aimed at responding to natural disasters or emergencies on the North Shore would be built at the site of the former Hā'ena School. The Wainiha Community Resilience Center would be used as a base for storing emergency supplies as well as a meeting space for community groups.⁶³

Related to these disasters are the effects of climate change on Hawai'i, which include more intense storms, noticeable changes to reefs such as coral bleaching, and beach erosion with sea level rise.⁶⁴ The State responded to this threat in 2021 and declared a climate emergency, the first state in the United States to do so. The resolution directs the State to take actions that would recognize the importance of considering effects on the climate and collaborate with organizations that aim to reduce climate change impacts.⁶⁵

Regarding the Kaua'i Belt Road (North Shore Section), HDOT set a resiliency goal for the 10-mile stretch of Kūhiō Highway to continue operating in its current location for the next two to three decades; however, the extent of erosion and sea level rise leave the long-term prospects of Kūhiō Highway's current alignment in an uncertain position. HDOT is considering a variety of options including relocation mauka of the current alignment that may include cutting through ridges and tunneling. All options would be considered with community and environmental impacts.⁶⁶ However, such a major change to the Kaua'i Belt Road could require later updates to its NRHP documentation to assess the roadway's historic integrity.

⁶⁰ Kuuwehi Hirashi, "Reopening the Road to Hā'ena," Hawai'i Public Radio, December 31, 2018, available at <https://www.hpr2.org/post/reopening-road-h-ena#stream/0>.

⁶¹ "Our View: Now Is the Time to Revisit the Aloha Pledge," Garden Island, April 14, 2021; See also AlohaPledge.com.

⁶² Allan Parachini, "Kaua'i: Picking up the Pieces after Big Disasters," Honolulu Civil Beat, February 9, 2019.

⁶³ Allan Parachini, "Groups Look to Fortify North Shore Disaster Resilience," Garden Island, February 20, 2020.

⁶⁴ Kristin Lam, "There's 'No Place on the Planet' – Not Even Hawai'i – to Escape Climate Change, Experts Say," USA Today, February 12, 2019.

⁶⁵ Alexandra Kelley, "Hawai'i to Become the First State to Declare Climate Emergency," The Hill, April 29, 2021.

⁶⁶ Brittany Lyte, "Lifeline to Kaua'i's North Shore Must Be Rebuilt Now, Relocated Later," Honolulu Civil Beat, April 20, 2018.

Kaua'i Belt Road (North Shore Section) (Additional Documentation)
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Kaua'i, Hawai'i
County and State

9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form.)

36 C.F.R. § 68.

36 C.F.R. § 800.

AECOM Technical Services, Inc., *Engineering Design Report for Kūhiō Highway, Rehabilitation of Wainiha Bridges*, October 2012.

AlohaPledge.com.

ASM Affiliates. *Archaeological Inspection and Assessment of Flood- and Landslide-Related Damage along a Portion of the Kauai Belt Road (North Shore Section) National Register of Historic Places (NRHP) Historic District*, May 13, 2021.

Birnbaum, Charles A. "Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes." National Park Service Technical Preservation Service, Preservation Brief 36, September 1994.

Bryan, Meredith. "A Guide to Kaua'i's Magical North Shore." *Conde Nast Traveler*, June 9, 2016.

Canalejas, Laurent. "Hanalei Bridge Turns 100." *Garden Island*, August 24, 2012.

Chang, Lester. "Hanalei Roads Committee against DOT Plan for North Shore Road." *Garden Island*, November 5, 2002.

Cook, Chris. "Robeson, Wilcox Honored for Preserving Hanalei Bridge." *Garden Island*, May 15, 2003.

Cook, Christopher Leland. "Kaua'i in History: A Guide to the Resources (Excerpt, Kaua'i: An Historical Overview)." Honolulu: History and Humanities Program of the State Foundation on Culture and the Arts/Kaua'i Historical Society, 2000.

Dekneef, Matthew. "Hawaiians Have More Than 200 Words for Rain." *Hawai'i Magazine*, March 4, 2016.

Duensing, Dawn E. *Hawai'i's Scenic Roads: Paving the Way for Tourism in the Islands* (Honolulu: University of Hawai'i Press, 2015).

Else, Jessica. "The Flood – One Year Later." *Garden Island*, April 19, 2019.

"Flash Flood Warning Issued for Kaua'i." *Garden Island*, March 14, 2018.

"Flooding of Epic Proportions: Homes Destroyed, Roads Closed, Many Rescued." *Garden Island*, April 16, 2018.

Kaua'i Belt Road (North Shore Section) (Additional Documentation)

Name of Property

Kaua'i, Hawai'i

County and State

Freudenthal, Bethany. "Over 100 Oppose Wainiha Bridges Project." *Garden Island*, February 16, 2018.

"Good Old Hanalei Bridge," *Garden Island*, October 3, 2004.

"Hanalei Bridge Open Again; Flash Flood Watch Remains in Effect." *Garden Island*, April 20, 2018.

Haworth, Tanner. "Kauai's North Shore Prepares to Reopen Flood-Damaged Kūhiō Highway." *Hawai'i News Now*, June 7, 2019.

HDOT, "Final Environmental Assessment/Finding of No Significant Impact, Project to Replace Temporary Wainiha Bridges (Replacement of the Temporary Wainiha Bridges and Rehabilitation of Kaua'i Belt Road, Kūhiō Highway, Halele'a District, Kaua'i Island, Hawai'i," Project No. HI STP SR560(1), December 2017. <https://highways.dot.gov/federal-lands/projects/hi/wainiha>.

HDOT. *Kūhiō Highway (Route 560) Historic Roadway Corridor Plan*. 2005.

HDOT. "North Kaua'i Emergency Flood Repairs, Section 106 Coordination Meeting." PowerPoint, May 3, 2018.

Hill, John. "Here's Why the Weather Experts Didn't See the Kaua'i Storm Coming." *Honolulu Civil Beat*, April 19, 2018.

Hirashi, Kuuwehi. "Reopening the Road to Hā'ena." Hawai'i Public Radio, December 31, 2018, available at <https://www.hpr2.org/post/reopening-road-h-ena#stream/0>.

Historic Hawai'i Foundation. "Emergency Repairs to Kaua'i Belt Road Will Retain and Strengthen Wai'oli Bridge, Demolish Two Other Historic Bridges." August 17, 2018.

Hitt, Christine. "The Rise and Fall of the Legendary Coco Palms Hotel." *Hawai'i Magazine*, June 24, 2016.

"Home Destroyed, Highway Closed, North Shore Flooded." *Garden Island*, April 14, 2018.

Impact Assessment, Inc., *Fishing, Seafood, and Community Research in the Main Hawaiian Islands: A Case Study of Hanalei Bay, Kaua'i*, State of Hawai'i Department of Land and Natural Resources, Division of Aquatic Resources, May 2012.

Ka 'Imi Na'auao O Hawai'i Nei Institute. "The Heiau Complex at Ke'e, Kaua'i," available at <https://kaimi.org/education/the-heiau/>, 2003.

Kaua'i Planning Commission. Meeting Minutes. November 12, 2019.

Kelley, Alexandra. "Hawai'i to Become the First State to Declare Climate Emergency." *The Hill*, April 29, 2021.

"Kūhiō Highway from Waikoko to Wainiha to Open to Local Traffic Beginning Friday." *Garden Island*, May 3, 2018.

Kaua'i Belt Road (North Shore Section) (Additional Documentation)

Name of Property

Kaua'i, Hawai'i

County and State

Lam, Kristin. "There's 'No Place on the Planet' – Not Even Hawai'i – to Escape Climate Change, Experts Say." *USA Today*, February 12, 2019.

Lyte, Brittany. "Lifeline to Kaua'i's North Shore Must Be Rebuilt Now, Relocated Later." *Honolulu Civil Beat*, April 20, 2018.

Mishan, Ligaya. "On Hawai'i, the Fight for Taro's Revival." *New York Times*, November 8, 2019.

Montgomery, Susan West. "Significance Is Always Intangible: An Interview with the Keepers of the National Register." *Forum Journal*, vol. 31, no. 1-2, Fall 2016/Winter 2017.

National Park Service. "How to Apply the National Register Criteria for Evaluation." *National Register Bulletin*, 1997.

National Park Service. "Defining Landscape Terminology." *Guidelines for the Treatment of Cultural Landscapes*, available at <https://www.nps.gov/tps/standards/four-treatments/landscape-guidelines/terminology.htm>.

National Weather Service, "Record Kaua'i and Oahu Rainfall and Flooding – April 2018," <https://www.weather.gov/hfo/RecordKaua'iandOahuRainfallAndFlooding-April2018>.

"Our View: Now Is the Time to Revisit the Aloha Pledge." *Garden Island*, April 14, 2021.

"'Overtourism' on Kaua'i." *Garden Island*, September 16, 2018.

Parachini, Allan. "Groups Look to Fortify North Shore Disaster Resilience." *Garden Island*, February 20, 2020.

Parachini, Allan. "Kaua'i Storm: 28 Inches of Rain Brings Landslides, Floods and Wrecked Homes." *Honolulu Civil Beat*, April 16, 2018.

Parachini, Allan. "Kaua'i: Picking up the Pieces after Big Disasters." *Honolulu Civil Beat*, February 9, 2019.

Parachini, Allan. "Kaua'i: The Path to Recovery in Hanalei Will Be a Long One." *Honolulu Civil Beat*, April 17, 2018.

"Paradise Found: The North Shore in Kaua'i." *Frommer's*, 2020.

"Protestors Briefly Block Kūhiō Highway." *Garden Island*, June 18, 2019.

Quintano, Anthony. "Firsthand Accounts of Kaua'i North Shore Flooding Devastation." *Honolulu Civil Beat*, April 17, 2018.

Reynolds, Christopher. "On Kaua'i's North Shore, Mother Nature Paints with Green." *Los Angeles Times*, April 18, 2014.

Kaua'i Belt Road (North Shore Section) (Additional Documentation)

Name of Property

Kaua'i, Hawai'i

County and State

Soboleski, Hank. "Old Kalapaki Recalled at the Opening of the Kaua'i Surf Hotel." *Garden Island*, June 4, 2017.

Sommer, Anthony. "North Shore Highway on Kaua'i Gains Protection." *Honolulu Star-Bulletin*, April 23, 2004.

Sommer, Anthony. "State Will Replace Rickety Bridge." *Honolulu Star-Bulletin*, September 23, 2004.

Eagle, Nathan. "Dangerous Bridges to be Replaced." *Garden Island*, November 2, 2007.

Span, Susan. "Flower Children on the North Shore of Kaua'i." *Smithsonian Magazine*, July 9, 2012.

"State Assesses Flood-Damaged Areas." *Garden Island*, April 19, 2018.

TenBruggencate, Jan. "Road Guardrail Issue Galvanizes Hanalei." *Honolulu Advertiser*, August 8, 2002.

Wheat, Dan. "Challenges in Paradise." *Capital Press*, November 15, 2013.

Wilson Okamoto & Associates, Inc. *Final Environmental Assessment, Kūhiō Highway, Remove/Repair/Replace Metal Members, Hanalei District, Kaua'i, Hawai'i*. January 2020.

Yap, Audrey Cleo. "One Year after Historic Floods, Kaua'i Residents Cautiously Rebuild." *NBC News*, April 7, 2019.

Previous documentation on file (NPS):

- ☐ preliminary determination of individual listing (36 CFR 67) has been requested
☒ previously listed in the National Register
☐ previously determined eligible by the National Register
☐ designated a National Historic Landmark
☐ recorded by Historic American Buildings Survey # _____
☐ recorded by Historic American Engineering Record # _____
☐ recorded by Historic American Landscape Survey # _____

Primary location of additional data:

- ☒ State Historic Preservation Office
☒ Other State agency
☐ Federal agency
☐ Local government
☐ University
☐ Other
Name of repository: _____

Kaua'i Belt Road (North Shore Section) (Additional Documentation)
Name of Property

Kaua'i, Hawai'i
County and State

Historic Resources Survey Number (if assigned): _____

10. Geographical Data

Acreage of Property 54

Use either the UTM system or latitude/longitude coordinates

Latitude/Longitude Coordinates

Datum if other than WGS84: _____

(enter coordinates to 6 decimal places)

- | | |
|--------------|------------|
| 1. Latitude: | Longitude: |
| 2. Latitude: | Longitude: |
| 3. Latitude: | Longitude: |
| 4. Latitude: | Longitude: |

Or

UTM References

Datum (indicated on USGS map):

☐ NAD 1927 or ☒ NAD 1983

- | | | |
|-------------|------------------|-------------------|
| 1. Zone: 04 | Easting: 451000 | Northing: 2456460 |
| 2. Zone: 04 | Easting: 450980 | Northing: 2456220 |
| 3. Zone: 04 | Easting: 449820 | Northing: 2456220 |
| 4. Zone: 04 | Easting : 449280 | Northing: 2455500 |
| 5. Zone: 04 | Easting: 448980 | Northing: 2455410 |
| 6. Zone: 04 | Easting : 447720 | Northing: 2455110 |

Kaua'i Belt Road (North Shore Section) (Additional Documentation)

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7. Zone: 04	Easting: 447030	Northing: 2455480
8. Zone: 04	Easting : 446760	Northing: 2455820
9. Zone: 04	Easting: 444420	Northing: 2456410
10. Zone: 04	Easting : 443700	Northing: 2456840
11. Zone: 04	Easting: 443680	Northing: 2456880
12. Zone: 04	Easting : 443480	Northing: 2457730
13. Zone: 04	Easting: 441450	Northing: 2457600
14. Zone: 04	Easting : 440310	Northing: 2457770
15. Zone: 04	Easting: 439640	Northing: 2457710

Verbal Boundary Description (Describe the boundaries of the property.)

The boundary for the Kaua'i Belt Road (North Shore Section) is unchanged from the 2004 NRHP registration form. It extends along and includes Kūhiō Highway, Route 560, between MP 0 in Princeville and MP 10 in Hā'ena. Its width is variable and coterminous with the HDOT right-of-way along this alignment.

Boundary Justification (Explain why the boundaries were selected.)

The boundary includes the portion of the Kaua'i Belt Road determined in the 2004 NRHP registration form to retain integrity and convey the historic property's significance in transportation, engineering, commerce, and social history. A review of that boundary completed for this 2021 NRHP update confirms that these boundaries are appropriate and includes an additional area of significance, conservation, to document efforts by local residents and advocacy groups to maintain, manage, and preserve the Kaua'i Belt Road between MP 0 and MP 10.

11. Form Prepared By

name/title: Guy V. Blanchard, Lead Architectural Historian

organization: WSP

street & number: 1001 Bishop Street, ASB Tower, Suite 2400

Kaua'i Belt Road (North Shore Section) (Additional Documentation)

Name of Property

Kaua'i, Hawai'i

County and State

city or town: Honolulu state: Hawai'i zip code: 96813

e-mail: guy.blanchard@wsp.com

telephone: 207-438-8619

date: July 2021

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property: Kaua'i Belt Road (North Shore Section)

City or Vicinity: Hanalei and Vicinity

County: Kaua'i

State: Hawai'i

Photographer: Malie McClellan

Date Photographed: April 14, 2021

Kaua'i Belt Road (North Shore Section) (Additional Documentation)

Name of Property

Kaua'i, Hawai'i

County and State

Description of Photograph(s) and number, include description of view indicating direction of camera:

- 1 of 16. View from Hanalei Valley Scenic Overlook, taro fields, view to the south.
- 2 of 16. View from Hanalei Bay Overlook, view to the west.
- 3 of 16. Hanalei Grade, view to the west.
- 4 of 16. Hanalei Bridge, view to the southwest.
- 5 of 16. Wai'oli Bridge, view to the east.
- 6 of 16. Wai'oli Bridge inscription, view to the north.
- 7 of 16. Waipā Bridge, view to the west.
- 8 of 16. Waipā Bridge inscription, view to the northeast.
- 9 of 16. Waikoko Bridge, view to the southeast.
- 10 of 16. Kaua'i Belt Road near Waikoko Bridge, view to the north.
- 11 of 16. Lumaha'i Beach (West) Lookout, view to the northwest.
- 12 of 16. Lumaha'i Valley, view to the south.
- 13 of 16. Wainiha Bridge #1, view to the west.
- 14 of 16. Wainiha Bridge #2 (foreground) and Wainiha Bridge #3, view to the west.
- 15 of 16. Mānoa Ford, view to the southwest.
- 16 of 16. Limahuli Culvert, view to the west.

Kaua'i Belt Road (North Shore Section) (Additional Documentation)

Name of Property

Kaua'i, Hawai'i

County and State

Paperwork Reduction Act Statement: This information is being collected for nominations to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.). We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

Estimated Burden Statement: Public reporting burden for each response using this form is estimated to be between the Tier 1 and Tier 4 levels with the estimate of the time for each tier as follows:

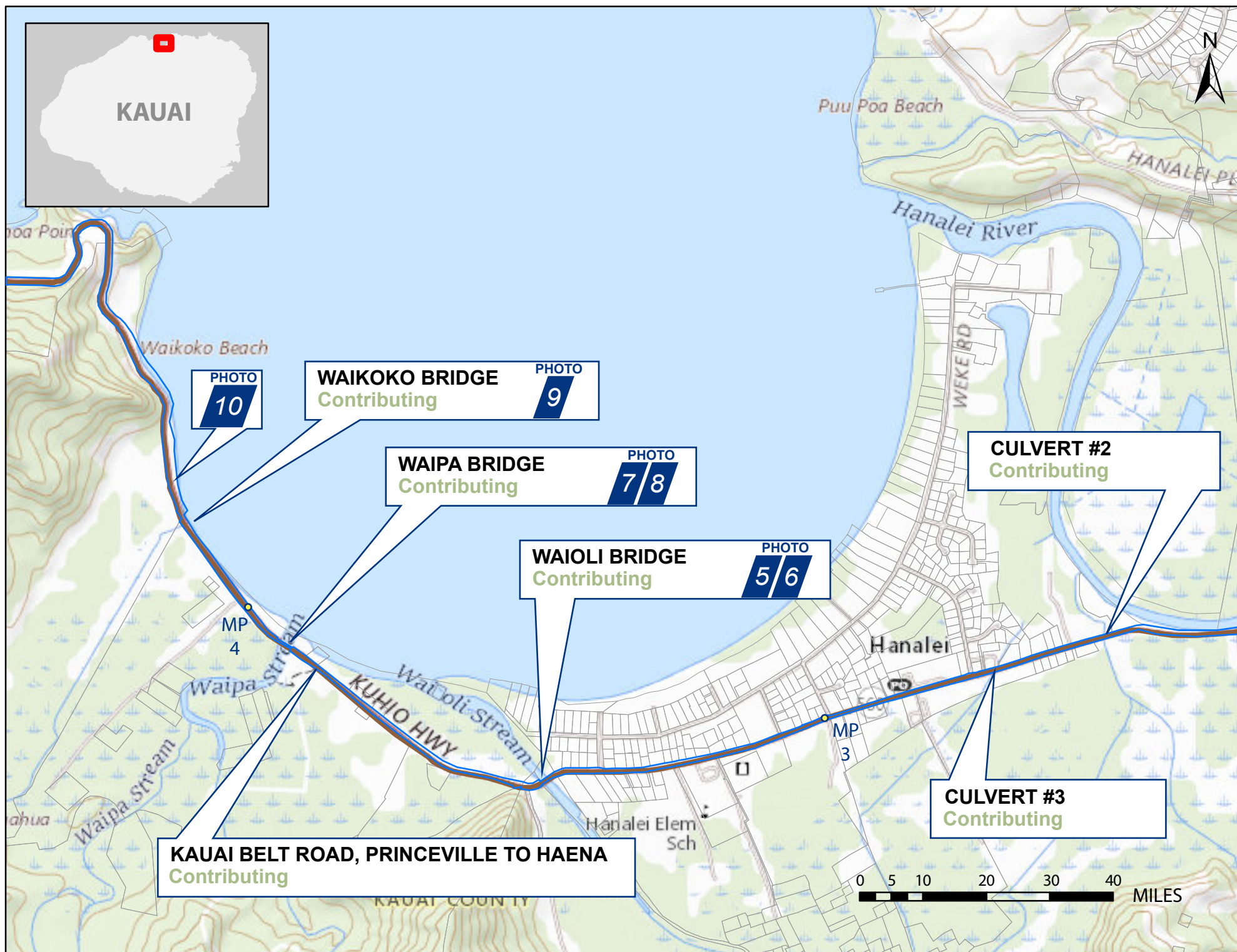
Tier 1 – 60-100 hours
Tier 2 – 120 hours
Tier 3 – 230 hours
Tier 4 – 280 hours

The above estimates include time for reviewing instructions, gathering and maintaining data, and preparing and transmitting nominations. Send comments regarding these estimates or any other aspect of the requirement(s) to the Service Information Collection Clearance Officer, National Park Service, 1201 Oakridge Drive Fort Collins, CO 80525.



0 5 10 20 30 40 MILES







KAUAI

0 5 10 20 30 40 MILES



HAENA BRIDGE #1
Contributing

WAINIHA BRIDGE #1
Noncontributing

PHOTO
13

LUMAHAI BRIDGE
Noncontributing

PHOTO
12

PHOTO
11

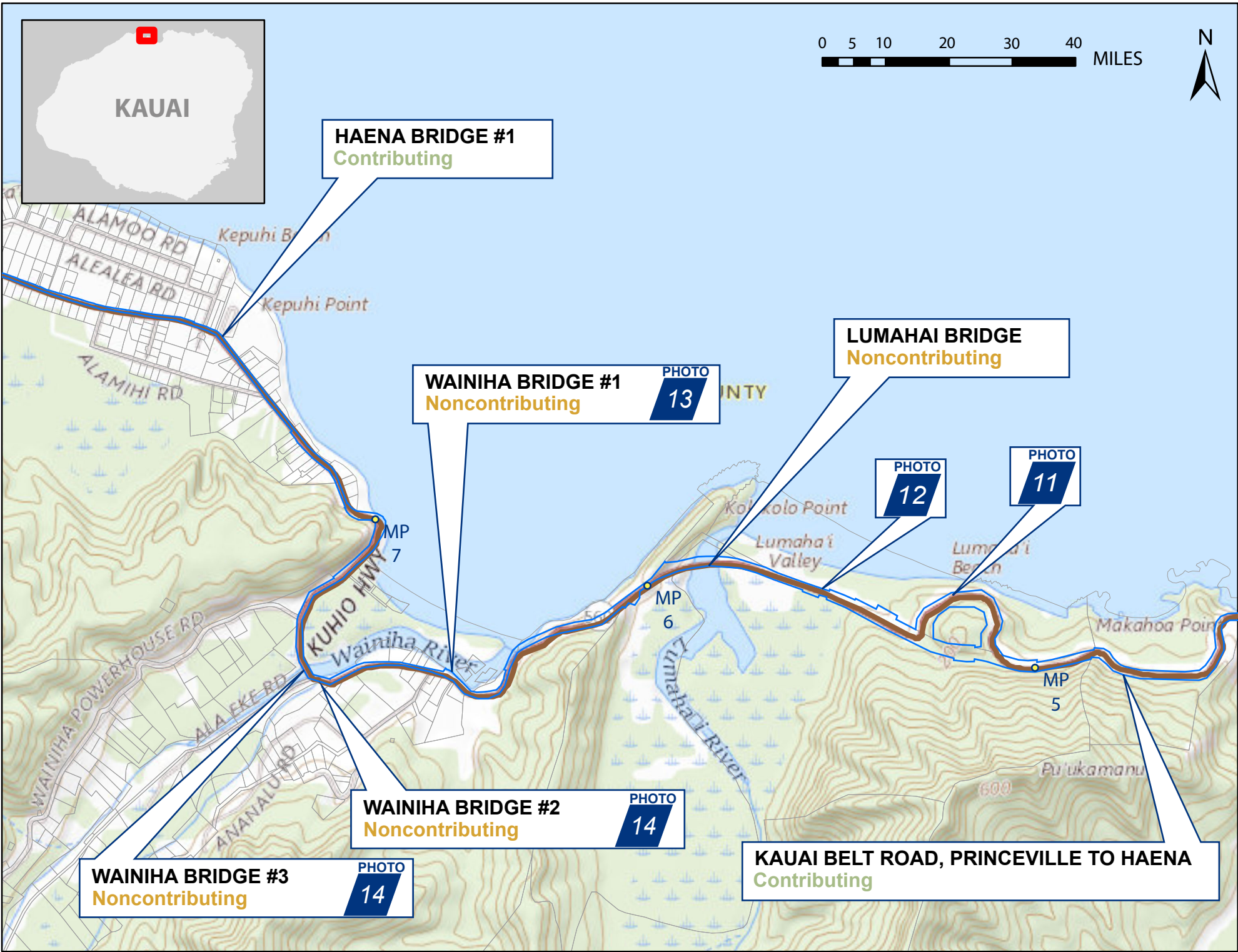
WAINIHA BRIDGE #2
Noncontributing

PHOTO
14

WAINIHA BRIDGE #3
Noncontributing

PHOTO
14

KAUAI BELT ROAD, PRINCEVILLE TO HAENA
Contributing





KAUAI

0 5 10 20 30 40 MILES



LIMAHULI CULVERT
Contributing

PHOTO
16

MANOA FORD
Contributing

PHOTO
15

HAENA BRIDGE #2
Noncontributing





Photo 1.



Photo 2.



Photo 3.



Photo 4.



Photo 5.



Photo 6.



Photo 7.



Photo 8.



Photo 9.



Photo 10.



Photo 11.



Photo 12.



Photo 13.



Photo 14.



Photo 15.



Photo 16.